

AMENDMENTS TO THE SPECIFICATION

Please amend on Page 1, Paragraph 1, lines 4-15 as follows:

For this application, the inventor claims priority to and the benefit of the following copending provisional applications: (a) provisional application entitled, "Space Diversity Trellis Interleaver," filed on December 15, 1999, assigned serial number 60/171,026, (~~Atty. Docket No. 61606-8310; Paradyne Docket No. 1999-24~~), and incorporated herein by reference, and (b) provisional application entitled, "Space Diversity Trellis Interleaver," filed on February 11, 2000, assigned serial number 60/181,994, (~~Atty. Docket No. 61606-8440; Paradyne Docket No. 1999-24~~), and incorporated herein by reference. The invention is also the subject of a contribution entitled, "G.shdsl: 4-Wire Space Diversity Convolutional Encoding" (T1E1.4/2000-087) and submitted by the inventor in February 2000 to a standards committee of the International Telecommunications Union (ITU) to assist same, which document is also incorporated herein by reference.

Please amend on Page 9, Paragraph 1, lines 1-14 as follows:

A second embodiment of the space diversity trellis interleaver system of the present invention is illustrated in FIGS. 3 and 4. FIGS. 3 and 4 illustrate a transmitter 60' and a receiver 60", respectively, for implementing this second embodiment. An advantage of this second embodiment is that the data rates on the communication connections COMM1, COMM2 can be separately and independently regulated and changed, whenever ~~appropriated~~ appropriate, depending upon the noise conditions of each connection. The rates are changed via a data throttling, mapping, or other operation in connection with each communication path. As an example, on one path, a mapping operation could be used to define each symbol with 8 bits, whereas on the other noisier communication path the mapping could be set to define each

symbol with 6 bits. Accordingly, the data rate of the former would be faster than the data rate of the latter, and the data rates can be independently changed, upon initialization or dynamically, to suit the particular channel noise conditions.